

CLAIMS

1. A fluid bearing device comprising:

a housing;

5 a bearing sleeve disposed inside the housing;

a shaft member inserted along an inner peripheral surface of the bearing sleeve; and

a radial bearing portion which supports the shaft member in a non-contact manner in a radial direction via a lubricating oil film that is generated within a radial bearing gap between the inner peripheral surface of the bearing sleeve and an outer peripheral surface of the shaft member, wherein

the housing is formed by injection molding of a resin material, and comprises a cylindrical side portion and a seal portion which forms a continuous integrated unit with the side portion and extends radially inward from one end of the side portion,

the seal portion comprises an inner peripheral surface which forms a sealing space with an opposing outer peripheral surface of the shaft member, and an outside surface which is positioned adjacent to the inner peripheral surface, and

an outer peripheral edge of the outside surface comprises a gate removal portion formed by removing a resin

gate portion.

2. The fluid bearing device according to claim 1,
wherein

5 the gate removal portion is formed in a ring shape.

3. The fluid bearing device according to claim 1 or 2,
wherein

the outside surface of the seal portion is applied
10 with an oil repellent.

4. A method of manufacturing a fluid bearing device
including a housing, a bearing sleeve disposed inside the
housing, a shaft member inserted along an inner peripheral
15 surface of the bearing sleeve, and a radial bearing portion
which supports the shaft member in a non-contact manner in
a radial direction via a lubricating oil film that is
generated within a radial bearing gap between the inner
peripheral surface of the bearing sleeve and an outer
20 peripheral surface of the shaft member,

the method comprising a housing molding step of
molding the housing by injection molding of a resin
material, the housing having a shape comprising a
cylindrical side portion, and a seal portion which forms a
25 continuous integrated unit with the side portion and

extends radially inward from one end of the side portion,
wherein

the seal portion comprises an inner peripheral
surface which forms a sealing space with an opposing outer
5 peripheral surface of the shaft member, and an outside
surface which is positioned adjacent to the inner
peripheral surface, and

in the housing molding step, a ring shaped film gate
is provided in a position corresponding with an outer
10 peripheral edge of the outside surface of the seal portion,
and a molten resin is injected through the film gate into a
cavity used for molding the housing.